

REMARKS

This Amendment is in response to an Office Action mailed July 9, 2007. In the Office Action, claims 2-11 and 13-34 were rejected under 35 U.S.C. §103(a). Applicants respectfully traverse all of the §103(a) rejections and respectfully request the Examiner to reconsider the allowability of these claims. Claims 2, 5, 10, 15, 20 and 30 have been amended.

Request for Examiner's Interview

The Examiner is respectfully requested to contact the undersigned attorney if after review, such claims are still not in condition for allowance. This telephone conference would greatly facilitate the examination of the present application. The undersigned attorney can be reached at the telephone number listed below.

Rejection Under 35 U.S.C. § 103

A. §103 REJECTION OF CLAIMS 10, 12-16, 18-20, 22, 24 AND 29

Claims 10, 13-15, 18-20, 22, 24 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Beach (U.S. Patent No. 6,067,297) in view of Chesson (U.S. Published Application No. 2002/0045428). Applicant respectfully traverses the rejection because a *prima facie* case of obviousness has not been established.

As the Examiner is aware, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *See MPEP §2143; see also In Re Fine, 873 F. 2d 1071, 5 U.S.P.Q.2D 1596 (Fed. Cir. 1988).* Herein, the combined teachings of the cited references fail to describe or suggest all the claim limitations.

With respect to independent claims 10 and 15, Applicants respectfully disagree that Beach does not disclose the modified beacon including a plurality of information elements such as, for example, an access point (AP) name, which is considered to be the AP address as set forth on page 21 of the Office Action. The AP address does not constitute the AP name and this distinction is denoted by amendments made to claims 10 and 15.

Moreover, in contrast with the Examiner's contention, Beach does not specifically disclose the first frame check sequence (FCS), which alleged constitutes the CRC utilized in MAC frames as outlined on col. 12, line 54 through col. 13, line 4. First, the CRC appears to be directed to signals from the wireless unit, as denoted by the setting of the To-AP flag that normally denotes a transmission to the AP. Besides this lack of teaching, even if the CRC is construed as the first FCS, Applicants respectfully disagree that the first and second FCS are duplicate parts for a multiplied effect. *See page 3 of the Office Action.* Rather, the first frame

check sequence is *specifically placed* as claimed to allow the receiver to confirm that the MAC header and other beacon information elements are received correctly, even if the test pattern contains error bits as denoted on page 9 of the Specification. *Emphasis added.* This is used to prevent unnecessary retries, and thus, is not merely duplicative.

Therefore, Applicant respectfully requests withdrawal of the outstanding §103(a) rejection as applied to independent claims 10 and 15 is requested.

Similarly with respect to independent claim 20, Applicants respectfully submit that a *prima facie* case of obviousness has not been established. Claim 20 of the subject application features “logic to broadcast the data frame as a first frame transmitted by the access point after broadcasting the special DTIM beacon *with the broadcast of the data frame being conducted in response to the broadcast the special DTIM.*” *Emphasis added.* In contrast, the combined teachings of Beach and Chesson fail to teach the data frame, a specific frame type as defined in the well-established IEEE 802.11 standard, being broadcast as the first frame after the broadcasting of the special DTIM frame.

Hence, withdrawal of the outstanding §103(a) rejection as applied to independent claim 20 is respectfully requested.

In addition, based on the dependency of claims 13-14, 18-19, 22, 24 and 29 on independent claims 1, 15 and 20, believed by Applicants to be in condition for allowance, no further discussion as to the grounds for traverse is warranted.

Withdrawal of the §103(a) rejection as applied to claims 10, 12-16, 18-20, 22, 24 and 29 is respectfully requested.

B. §103 REJECTION OF CLAIMS 2-3, 5-8, 25-28, 30-32 AND 34

Claims 2-3, 5-8, 25-28, 30-32 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beach in view of Chesson and a cited publication (Koutroubinas). Applicants respectfully traverse the rejection because a *prima facie* case of obviousness has not been established. In general, neither Beach, Chesson nor Koutroubinas, alone or in any combination, describes or suggests the invention as claimed.

With respect to independent claims 2 and 5, as an example, we agree with the Examiner that Beach does not specifically disclose a *data frame* being the first frame transmitted after the beacon. However, Applicants respectfully disagree with the allegations that Chesson “teaches a modified beacon method, and further teaches a data frame (e.g. in the data slot at 528 in Fig. 1) is a first frame transmitted after the beacon (e.g. overlaid start beacon 520, see Fig. 1 and paragraphs 0048-0069).”

As previously stated, Chesson refers to a defined time slot that exists only after a Point Coordination Function “PCF” type beacon. *See paragraphs 0047 and 0052 of Chesson.* In Chesson, any given slot time (the 528 elements) does not appear to be for use by the AP for broadcast purposes, but is assigned to one of the associated stations/ nodes or shared in time

between several nodes including the controller node [AP].” See paragraph 0048 of Chesson. In contrast, the claimed invention is directed to transmissions of a beacon with a special indicator (bit) set by an AP. The AP then transmits a data frame *being a first frame transmitted after the beacon*. This data frame is a “special” data frame in that it contains *load balancing information* for use by a wireless unit to determine whether to establish communications with the access point. The broadcasting of this data frame is conducted *in response to the broadcasting the special DTIM*. Emphasis added.

Moreover, Koutroubinas does not teach a beacon having a NAV value that is set to denote a transmission of a data frame after the special beacon. The passage reads “[e]very station in the network buffers its data and postpones any pending transmissions to the appropriate time instant, by setting its Network Allocation Vector (NAV) value.” This passage cannot and should not be construed as teaching a special DTIM beacon that comprises “a field having a traffic indicator bit that is set to denote a transmission of a data frame after the DTIM beacon” where this data frame is the first frame broadcast by the access point after the beacon. Applicants believe that the NAV is not transmitted as part of the beacon per se, but is merely a vector stored by the wireless units to control transmission timing. As defined in the IEEE 802.11 standard, the NAV is “an indicator, maintained by each station, of time periods when transmission onto the wireless medium (WM) will not be initiated by the station whether or not the station’s clear channel assessment (CCA) function senses that the WM is busy.”

In addition, independent claim 5 features the limitation of broadcasting *the data frame*, which is the *first frame transmitted by the access point after the special DTIM beacon*. Emphasis added. This is done in order to reduce an amount of time required by a wireless unit in a power-save mode to remain powered-on to receive the data frame. This data frame is defined *by the IEEE 802.11 standard*. Emphasis added.

Hence, withdrawal of the §103(a) rejection as applied to independent claims 2 and 5 should be withdrawn.

With respect to dependent claims 3, 6-8, 25-28, 30-32 and 34, Applicants respectfully submit that these claims are dependent on independent claims 2, 10 and 20, believed by Applicants to be in condition for allowance, no further discussion as to the grounds for traverse is warranted. Applicants reserve the right to present such arguments in an Appeal is warranted.

Therefore, withdrawal of the §103(a) rejection as applied to pending claims 2-3, 5-8, 25-28, 30-32 and 34 is respectfully requested.

C. §103 REJECTION OF CLAIM 17

Claim 17 was rejected under 35 U.S.C. §103(a) as being unpatentable over Beach in view of Chesson and Coveley (U.S. Patent No. 5,548,821). Applicants respectfully traverse the rejection because a *prima facie* case of obviousness has not been established and incorporate the arguments set forth in claim 10 that the claim limitations of multiple frame check sequences is neither taught nor suggested by the cited references.

Withdrawal of the outstanding §103(a) rejection as applied to claim 17 is respectfully requested.

D. §103 REJECTION OF CLAIMS 4, 9, 11, 21 AND 23

Claims 4, 9, 11, 21 and 23 rejected under 35 U.S.C. §103(a) as being unpatentable over Beach in view of Chesson, Koutroubinas and Coveley. Applicants respectfully traverse the rejection because a *prima facie* case of obviousness has not been established.

First, with respect to claim 11, Applicants incorporate the arguments set forth in section (C) that multiple FCSs are not taught or suggested by the cited references and the arguments for allowance is presented above. Moreover, based on the dependency of claims 4, 9, 11, 21 and 23 on independent claims 2, 10 and 20, believed by Applicants to be in condition for allowance, no further discussion as to the grounds for traverse is warranted.

Withdrawal of the §103(a) rejection as applied to claims 4, 9, 11, 21 and 23 is respectfully requested.

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Conclusion

Applicants respectfully believe that all claims are in condition for allowance. Allowance of the pending claims is respectfully requested at the Examiner's earliest convenience.

Respectfully submitted,

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